Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Reviews

Cambrian Brachiopoda. By CHARLES D. WALCOTT. Monograph of U.S. Geological Survey, No. LI, Part I, Text, pp. 1–872; Part II. Plates pp. 1–363, Plates I–CIV. Washington, 1912.

Rarely, perhaps never, has there been published a paleontological monograph so complete in every detail as this great work on the Cambrian brachiopods by Dr. Walcott. The work is not merely a monograph of the Cambrian brachiopods of North America, but of the Cambrian brachiopods of the world, and it includes also those lower Ordovician species which are close allies of, and doubtless descendants from, the Cambrian forms. The treatment of the fossil forms is both geological and biological. A large amount of geologic and geographic data, of great value to students of geology, is brought together in most convenient tabular form. Many pages are devoted to a record of every locality throughout the world from which Cambrian brachiopods have been secured, giving lists of species, not only of the brachiopods but of other fossil forms which are associated with them, and giving also the stratigraphic relations.

The zoölogical treatment of the fossil organisms is very complete. The various structural details are described with great care. Every line of investigation which gave promise of throwing light upon the relationships of these early forms was assiduously followed, and the results are clearly recorded.

The number of Cambrian species fully described and illustrated in the monograph is 477, with 59 varieties. These are distributed among 44 genera and 15 subgenera, which are grouped under 14 families belonging to the three orders Atremata, Neotremata, and Protremata. The lower Ordovician species discussed are 64 species with 3 varieties, belonging to 14 genera and 3 subgenera, and 6 families. Nearly 77 per cent of the Cambrian species are members of the two inarticulate orders Atremata and Neotremata, and the more specialized order of the articulata, the Telotremata, is not represented. In a survey of this vast array of comparatively simple types of brachiopods, a large proportion of which are of small size, sometimes even minute, many series of which are notably uniform in their general configuration, the astonishing thing is that so great an amount of generic and specific differentiation has been so successfully determined. The lines of differentiation are shown already to have deployed in many directions in the earliest Cambrian time, and many lines became extinct during the Cambrian.

In order to show the magnitude of the contributions to our knowledge of Cambrian brachiopods during the past few years by Dr. Walcott, it is only necessary to make comparison with the number of forms recorded in earlier works. In Schuchert's *Synopsis of American Fossil Brachiopods*, published in 1897, 116 species and varieties of American Cambrian brachiopods are recorded, while in the present work 474 such forms are described, an increase of over 300 per cent. In the same work by Schuchert the following numbers of species and varieties are recorded from the remaining Paleozoic systems: Ordovician 319; Silurian 311; Devonian 663; Carboniferous 478. These numbers would in all cases be somewhat augmented were a new brachiopod census taken at the present time, but the increase would be in no manner comparable with the 300 per cent increase in our known Cambrian forms. Through the publication of this work of Dr. Walcott the records of the Cambrian brachiopod life are made more complete than for any other geologic period.

S. W.

The Physiography and Geology of the Coastal Plain Province of Virginia. By WILLIAM BULLOCK CLARK and BENJAMIN LEROY MILLER. With chapters on "The Lower Cretaceous," by EDWARD W. BERRY; and "The Economic Geology," by THOMAS LEONARD WATSON. Bull. IV, Virg. Geol. Survey. Pp. 274; pls. 19; 1 map.

A valuable and detailed contribution to the physiography and geology of the Coastal Plain. The formations are minutely described and well illustrated; tables are given containing complete lists of the fossils found together with their geographic and stratigraphic distribution.

The submerged portion of the Coastal Plain is comparatively smooth near the edge of the continental shelf, but nearer land there are numerous small hills with their long diameters roughly parallel to the shore line. The submarine covering near shore consists of fine sands mixed with broken molluscan shells, and local deposits of pebbles and blue mud; farther from shore finer deposits are found. The emerged portion of the plain slopes with gradually decreasing gradient to the shore line. Topo-